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EXAMINER

PADMANABHAN, KAVITA

ART UNIT PAPER NUMBER

2161

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,200

Applicant(s)

DALRYMPLE ET AL.

Examiner

Kavita Padmanabhan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are pending and have been examined.
2. Claims 1-21 are rejected.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 19** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 recites the limitation "a second program application backup database" in line 3 of the claim. However, the applicant's specification does not make mention of a second program application backup database and the applicant's drawings appear to depict only one program application backup database, denoted by reference character 56. Therefore it is unclear to what this limitation is referring.

The examiner will apply prior art to these claims as best understood, giving the claim language its broadest reasonable interpretation, in light of the above rejections.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 1-3, 5-7, 9-14, and 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen** (US 6,611,850) **in view of Steele et al.** (US 2003/0212716, hereinafter "Steele"), and **further in view of Applicant's Admitted Prior Art** (applicant's specification, pages 1-6, hereinafter "AAPA").

In regards to **claim 1**, **Shen** teaches creating a backup of one or more storage media that store files associated with the application program to be restored (**Shen; col. 14, lines 52-53**), creating an initial application program backup of the application program including backing up files associated with the application program (**Shen; col. 11, line 64 – col. 12, line 32**), periodically inventorying the one or more storage media to detect a change in a file associated with the application program (**Shen; col. 16, lines 3-6**), and responsive to a detected change, creating an update application program backup of the application program including backing up files associated with the application program (**Shen; col. 16, lines 12-18**).

Shen does not expressly teach the backup being an image backup or the file being backed up and restored being an application program including an application program configuration, the application program associated with a computer that includes an operating system with a common applications registry.

Steele teaches creating an image backup of storage media (**Steele; par [0055], lines 4-7**).

AAPA teaches a common registry maintained by the operating system that contains parameters, settings, etc for program applications (**AAPA; p2, line 30 – p3, line 15**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to create the backup of the storage media of Shen as image backups to allow integrity checks and routine maintenance to be performed on the backup data (**Steele, par [0059], lines 8-18**) and, moreover, to perform the backup/restoration method of Shen in an environment such as that taught by AAPA,

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since a common application registry provides the admitted well known advantage of saving disk space and reducing file allocation table size and complexity (**AAPA; p3, lines 11-15**).

In regards to **claim 2, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the creating of an update application program backup does not overwrite the initial application program backup or any previous update application program backup (**Shen; col. 16, lines 63-67**).

In regards to **claim 3, Shen, Steele, and AAPA** teach the method as set forth in claim 2, wherein each application program backup is dated with a creation date (**Shen; col. 16, lines 51-59**).

In regards to **claim 5, Shen, Steele, and AAPA** teach the method as set forth in claim 3, further including:

- restoring the application program to a state corresponding to a selected creation date by copying information contained in an application program backup having the selected creation date onto the one or more storage media (**Shen; col. 19, lines 57-62; col. 20, lines 6-19**).

In regards to **claim 6, Shen, Steele, and AAPA** teach the method as set forth in claim 5, wherein the restoring further includes:

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- prior to the copying of information contained in the application program backup, copying the image backup onto the one or more storage media (**Shen, col. 14, lines 51-52; Steele, par [0055], lines 4-11; image backup can serve as a baseline before applying the application program backup**).

In regards to **claim 7, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- responsive to a detected change, categorizing the detected change as one of normal and suspicious (**Shen, col. 20, lines 42-50 – modification triggers a backup, and at that point it is determined whether the file is corrupted, so obviously determining whether the modification is acceptable/normal or corrupt/suspicious**); and
- responsive to a suspicious detected change, notifying a human of the suspicious detected change (**Shen; col. 15, lines 41-46 –obvious that an alert could be displayed when a backup is performed after a modification**).

In regards to **claim 9, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- repeating the steps of creating an initial application program backup, periodically inventorying the one or more storage media to detect a change in a file associated with the application program, and creating an update application program backup responsive to a detected change for at least a second

application program (**refer to citations given for claim 1, and also Shen, Fig. 5 and Fig. 6 – process is repeated for all the target files selected**).

In regards to **claim 10, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the step of periodically inventorying the one or more storage media to detect a change in a file associated with the application program is performed responsive to a regular operation of the computer (**Shen; col. 15, lines 66-67; col. 16, lines 3-6**).

In regards to **claim 11, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein:

- the step of periodically inventorying further includes detecting a change in contents of a non-volatile memory which pertain to the application program (**Shen; col. 16, lines 3-6**); and
- the step of creating an update application program backup further includes recording the contents of the non-volatile memory which pertain to the application program (**Shen; col. 11, lines 4-6**).

In regards to **claim 12, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the files associated with the application program include the common applications registry (**AAPA; p2, line 30 – p3, line 3**), and the steps of creating an initial

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application program backup and of creating an update application program backup each further include:

- recording entries of the common application registry that pertain to the application program (**Shen; col. 11, line 64 – col. 12, line 32 – obvious that the associated files in the common application registry could also be selected as target files to be monitored and backed up periodically).**

In regards to **claim 13, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- transferring the application program including the application program configuration to a second computer by copying information contained in an application program backup onto the one or more storage media that are accessible by the second computer (**Steele; Fig. 9A and Fig. 9B; par [0055], lines 11-14; par [0056], line 2 – obvious that the backups could be stored on a storage device that is accessible by other computers).**

Claim 14 is rejected with the same rationale given for claims 3, 5, and 12, taken together.

Claim 16 is rejected with the same rationale given for claim 6.

In regards to **claim 17, Shen, Steele, and AAPA** teach the system as set forth in claim 14, wherein the computer is connected to a server system, and the application program backup is stored on the server system (**Shen; col. 11, lines 14-18**).

In regards to **claim 18, Shen, Steele, and AAPA** teach the system as set forth in claim 14, further including: an application program backup database accessed by the application program backup software program and the backup coordinating software program that identifies the files and the entries of the common applications registry that pertain to the application program (**Shen; col. 15, line 66 – col. 16, line 6**).

Claim 19 is rejected with the same rationale given for claims 9 and 18, taken together.

Claim 20 is rejected with the same rationale given for claim 7.

Claim 21 is rejected with the same rationale given for claim 11.

8. **Claims 4 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen in view of Steele, further in view of AAPA, further in view of Devarakonda et al.** (US 2003/0225801, hereinafter "Devarakonda"), **and further in view of Green et al.** (US 2003/0220948, hereinafter "Green").

In regards to **claim 4, Shen, Steele, and AAPA** teach the method as set forth in claim 3.

Shen, Steele, and AAPA do not expressly teach deleting an application program backup having an oldest creation date of a plurality of application program backups responsive to both of a number of application program backups exceeding a selected number, and a time interval between a present date and the oldest creation date exceeding a selected time interval.

Devarakonda teaches attributes specifying the length of time that data should be kept and the number of versions of data that should be maintained as well as policies prescribing actions that should be taken on data when the time has elapsed or the number of versions is exceeded (**Devarakonda; par [0029], lines 7-16**).

Green teaches deleting the oldest backup when a predetermined number of members of the collection of backups is exceeded (**Green; par [0015], lines 9-19; par [0039], lines 17-19**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Shen, Steele, and AAPA incorporating the functionality taught by Devarakonda and Green, thereby allowing policies to be set for the maintenance of the backup data (**Devarakonda; par [0029], lines 2-4, 9-11**) and to free up storage space (**Green; par [0033], lines 10-18**).

Claim 15 is rejected with the same rationale given for claim 4.

9. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen in view of Steele, further in view of AAPA, and further in view of Otsuka et al.** (US 6,564,235, hereinafter "Otsuka").

In regards to **claim 8, Shen, Steele, and AAPA** teach the method as set forth in claim 7.

Shen, Steele, and AAPA do not expressly teach responsive to a suspicious detected change, waiting to receive an approval from the human before creating the update application program backup.

Otsuka teaches a user performing an approval operation regarding a backup (**Otsuka; col. 32, lines 57-63**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Shen, Steele, and AAPA incorporating the user interactivity functionality of Otsuka, whereby when the alert is output on the display, as taught by Shen, the user would be able to approve the backup to continue, thereby providing the advantage of allowing the user to have control over the operations of the backup process (**Otsuka; col. 32, lines 55-63**).

Conclusion

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kavita Padmanabhan whose telephone number is 571-272-8352. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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January 6, 2005



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